## 501834593 02/28/2012

## PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## CONVEYING PARTY DATA

Name	Execution Date
Jeffrey Clifford Mogul	11/29/2011
Naveen Muralimanohar	12/01/2011
Mehul A. Shah	12/05/2011
Eric A. Anderson	12/02/2011

#### RECEIVING PARTY DATA

Name:	Hewlett-Packard Development Company, L.P.	
Street Address:	11445 Compaq Center Drive West	
City:	Houston	
State/Country:	TEXAS	
Postal Code:	77070	

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13285735

## CORRESPONDENCE DATA

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Mail.

Correspondent Name: Hewlett-Packard Company
Address Line 1: 3404 E. Harmony Road MS 35
Address Line 2: Intellectual Property Administration
Address Line 4: Fort Collins, COLORADO 80528

NAME OF SUBMITTER: Felipe Hernandez

Total Attachments: 4

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> PATENT REEL: 027773 FRAME: 0091

13285735

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Rev 10/09 (Assignment)

PATENT APPLICATION

ATTORNEY DOCKET NO. \_\_\_

82753556

#### ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPDC), in furtherance of my/our obligations to the Hewlett-Packard Company and its subsidiaries and affiliates, and do hereby assign and transfer to HPDC, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:

title and interest, including the right of priority, in, to and ul entitled:	
METHODS AND APPARATUS TO ACCESS MEMORY	
Filing Date: October 31, 2011	Anadantian bia , 42/205 725
held and enjoyed by HPDC, its successors, assigns, nominaterms for which said Letters Patent respectively may be grame would have been held and enjoyed by me/us had this AND I/we hereby covenant that I/we have full right we have not executed and will not execute any agreement that I/we will, each time a request is made, and without unnecessary or desirable to perfect the title to said invention Patent, to HPDC, its successors, assigns, nominees or I HPDC, or to its nominee, all known facts respecting said Letters Patent, to testify in any legal proceedings, to sign a continuations, C-I-P's, reissue and foreign applications, to do everything possible to aid HPDC, its successors, assenforce, for its or their own benefit, proper patent protect countries provided the expenses which may be incurred I paid by HPDC;  AND I/we hereby authorize and request the Comand any official of any country or countries foreign to applications as aforesaid, to issue to HPDC, as assigned.	application for said Letters Patent, and any and all Letters eto which may be granted thereon or therefore; and any Patent.  Ins in my/our name for Letters Patent in any country, to be nees or legal representatives, to the full end of the term or granted, reissued or extended, as fully and entirely as the sassignment, and transfer not been made; and that I/I to convey the entire interest herein assigned, and that I/I to conflict herewith, and I/we further covenant and agreed due delay, execute and deliver all such papers as may be in(s) or improvement(s), said application and said Letters regal representatives, and I/we agree to communicate to invention(s) or improvement(s), said application and said lawful papers, to execute all disclaimers and divisionals, make all rightful oaths and declarations, and generally to signs, nominees and legal representatives to obtain and ion for said invention(s) or improvement(s) in any and all to possible in lending such cooperation and assistance are missioner of Patents and Trademarks of the United States whose duty it is to issue patents on a of the entire right, title and interest, any and all Letters
Patent for said invention(s) or improvement(s), including a be issued and granted on or as a result of the application at the attempts of the patential of the application and direct the attempts of the patential of the patentia	
application now identified by the attorney docket-number	and title set forth above as soon as the same shall have
been made known to them by the United States Patent and	3 Trademark Office.
M M 145	11/29/204
Inventor & Stignature	Date Assignment Signed
Jeffrey Clifford Mogul	11/29/2011
Inventor's Typed Name	Date Aphlication Signed
Inventor's Signature	Date Assignment Signed
Naveen Muralimanohar	
Inventor's Typed Name	Date Application Signed

Page 1 of 2

PATENT APPLICATION

82753556 ATTORNEY DOCKET NO.

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I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston,

Texas, (hereinafter HPDC), in furtherance of my/our obligations subsidiaries and affiliates, and do hereby assign and transfer to HPDC title and interest, including the right of priority, in, to and under an appl entitled: METHODS AND APPARATUS TO ACCESS MEMORY	i, its successors and assigns, the entire right,
Filing Date: October 31, 2011 Application	on No.: 13/285,735
and the invention(s) and improvement(s) set forth therein, and any an P's), divisionals, and renewals of and substitutes for said application for Patent of the United States and of countries foreign thereto which may reissues, or reexaminations, or extensions of said Letters Patent.  I/we additionally authorize HPDC to file applications in my/out held and enjoyed by HPDC, its successors, assigns, nominees or legal terms for which said Letters Patent respectively may be granted, reisseame would have been held and enjoyed by me/us had this assignment.  AND I/we hereby covenant that I/we have full right to convey we have not executed and will not execute any agreement in conflict I that I/we will, each time a request is made, and without undue delay, enecessary or desirable to perfect the title to said invention(s) or improvement, to HPDC, its successors, assigns, nominees or legal representation, to testify in any legal proceedings, to sign all lawful pap continuations, C-I-P's, reissue and foreign applications, to make all rig do everything possible to aid HPDC, its successors, assigns, nomineer for its or their own benefit, proper patent protection for said	and all continuations, continuations-in-part (C-t- or said Letters Patent, and any and all Letters hay be granted thereon or therefore; and any ir name for Letters Patent in any country, to be if representatives, to the full end of the term or sued or extended, as fully and entirely as the it, and transfer not been made; the entire interest herein assigned, and that I/ nerewith, and I/we further covenant and agree execute and deliver all such papers as may be rovement(s), said application and said Letters entatives, and I/we agree to communicate to or improvement(s), said application and said pers, to execute all disclaimers and divisionals, phtful oaths and declarations, and generally to nees and legal representatives to obtain and invention(s) or improvement(s) in any and all
countries provided the expenses which may be incurred by me/us in paid by HPDC;  AND I/we hereby authorize and request the Commissioner of and any official of any country or countries foreign to the United applications as aforesaid, to issue to HPDC, as assignee of the entit Patent for said invention(s) or improvement(s), including any and all Libe issued and granted on or as a result of the application aforesaid, in I/we further authorize and direct the attorneys of record to is application now identified by the attorney docket number and title sat been made known to them by the United States Patent and Trademark	Patents and Trademarks of the United States States whose duty it is to issue patents on re right, title and interest, any and all Letters etters Patent of the United States which may accordance with the terms of this assignment, unsert the serial number and filing date of said torth above as soon as the same shall have
Inventor's Signature	Date Assignment Signed
Jeffrey Clifford Mogul	
Inventor's Typed Name	Date Application Signed
<u> Karangan</u>	12 / / 2011 Date Assignment Signed
Inventor's Signature	,
Naveen Muralimanoher Inventor's Typed Name	Date Application Signed

Rev 10/09 (Assignment)

Page 1 of 2

## PATENT APPLICATION

ATTORNEY DOCKET NO. \_\_\_\_\_82753556

# **ASSIGNMENT OF PATENT APPLICATION (cont.)**

Mehufa. Shaf Inventor's Signature	12/5/2011
Inventor's Signature	Date Assignment Signed
Mehul A. Shah	12/5/2011
Inventor's Typed Name	Date Application Signed
Inventor's Signature	Date Assignment Signed
Eric A. Anderson	
Inventor's Typed Name	Date Application Signed
Inventor's Signature	Date Assignment Signed
Inventor's Typed Name	Date Application Signed
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## PATENT APPLICATION

ATTORNEY DOCKET NO. 82753556

# **ASSIGNMENT OF PATENT APPLICATION (cont.)**

Inventor's Signature	Date Assignment Signed
Mehul A. Shah	
Inventor's Typed Name	Date Application Signed
	202e11
Inventor's Signature	Date Assignment Signed
Eric A. Anderson	2D=11
Inventor's Typed Name	Date Application Signed
Inventor's Signature	Date Assignment Signed
Inventor's Typed Name	Date Application Signed
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**PATENT REEL: 027773 FRAME: 0095**